

THOMAS E. LADNER, LADNER'S LANDING, FRASER RIVER

JULY 18, 1895.

VICTORIA CANNING COMPANY.

Went in one of the canneries here. Said the steam bath which he uses (same as at New Westminster) is quite new in this region. Called report. His are of wood. Same were used at Ewen's.

Does not believe offal harms salmon if put in where there is a current. This cannery is in a cove, and have taken their offal out farther in the river to dump.

Many small fish which he calls suckers used to be about the canneries and devour the offal as it was thrown in. Since they stopped putting in offal about here these suckers have disappeared, have gone up to the spawning grounds where they devour the eggs and fry. In this way the stopping of putting offal into the water has done much harm.

Says that at Point Roberts Goodfellow, who

runs one net independent of the others is most intelligent man there.

Drysdale and Wadham, are both interested there, and have both been on this side. There is some question about their nationality at present. They have been Canadian citizens. Wadhams belonged at Ladner's Landing for a long time.

Ladner gets Goodfellow's fish. Sends a boat around for them.

Ladner thinks the great destruction of salmon is in the headwaters of the river, where the Indians obtain and dry large quantities. They make use of the small fish, 5 or 6 inches long.

July 19, 1895.

Thos. E. Ladner, Ladner.

13 fish now required to make 48 lbs. or 1 case salmon, at  $7 \frac{1}{2}$  lbs. apiece would make  $97 \frac{1}{2}$  lbs., about  $\frac{1}{2}$  waste.

Sometimes as few as 9, 10 or 11 fish required for 1 can. The waste is from  $\frac{1}{3}$  to  $\frac{1}{2}$ .

There are 15 canneries at Steventons.



The mouth of the Fraser River is working north. Position has changed much.

Fish as far as 4 or 5 miles off Sandflat at mouth Fraser River, as far as dirty water goes. Down to boundary and as far north as Grey's Point. Sometimes up to mouth of Howes Sound.

July 18, 1895, left New Westminster in the Government launch and went down the Fraser River. Stopped at cannery of Mr. Ewen, but did not find him there. Continued down to Ladner's, where the launch left us. Saw Mr. Thos Ladner. went through on of his canneries. Spent the evening at his house and interviewed him.

The next morning (July 19) at 6, took his steamer Eva, and with him made the trip out through the main entrance of the Fraser; down the outer coast, keeping just clear of the shoal, and coming in close to the S.W. corner of Point Roberts. Steamed along the south side of Point Roberts and landed at the cannery at the S.E. corner.

Interviewed Mr. Wadhams, Captain Kirby (in charge of the trap nets) and the Customs Inspector, Mr Webber.

Then proceeded on foot along the east shore of Point Roberts, stopped and interviewed Mr.

Goodfellow. Continued on up to the picnic grounds just south of the boundary line, and then to the line, where we found our team awaiting us. Rode back to Ladner's.

During the evening interviewed Mr. Green at Ladner's (Deputy Collector), and Mr. A. Lord, manager of one of the Canneries belonging to the A.B.C. Co.

In the morning of July 20, came up to New Westminster on the regular steamer Edgar.

The Fraser River is very thick with sediment at this season, and also carries a good deal of drift stuff. Every where south of New Westminster it contains many hidden snags, and some more or less exposed. I suppose the same is true for some distance above this place.

The color of the water is somewhat slaty, a little brighter than slate, and a color hard to name. However, it is a much lighter color than the Potomac, but the sediment is very fine, and

thoroughly well held by the water.

This discolored water passes a long distance from the mouth of the river. It continued as far south as the boundary line, and had not entirely disappeared at the S.W. corner of Point Roberts. The drift fishing at sea is carried on inside of the discolored water, where the nets will not be seen by the fish, and, according to Mr. Ladner, they fish as far south as the boundary, as far north as Gray's Point, and sometimes to the mouth of Howe's Sound, and to a distance of 4 or 5 miles off the edge of the flats, in front of the delta, and in the direction of Vancouver Island. The water of the Fraser is, therefore, well distributed, due, besides its own current, to the power and charges of the tide. The river now is in flood, but when it falls much, of course, the water becomes much clearer.

It was about from 7 to 8 o'clock as we passed from the mouth of the river to the boundary line.

The scene outside was very lively - as far north as we could see, a few as far to the west as we could see, and down to the boundary line, below which they are not supposed to go. There were several hundred boats at work outside the mouth. In some places especially near the main mouth and canoe Pass they were thickly clustered, and in the other places they were more scattered. They were <sup>at work</sup> ~~about~~ all over the flats, unless it may have been near the shore, and they were also fishing in the deeper water outside the shoal.

Each boat uses its 150 fathoms of netting in one piece, the boat being attached at one end, and a buoy, at the other. The buoy may consist of a square oil can, or be of wood. The nets are at the surface, the floats being plainly seen. Each boat is marked with its license number on each side of the bow, together with the initials of the owner or cannery. The buoy also has the same number upon it. The nets extended in all

directions, probably dependent upon the direction of the current at the place. The most we passed near to probably had their nets at right angles to the shore, or approximately so. The nets were so close together in places that the tug had to work carefully between them, notwithstanding that we were steaming well offshore. Had we been closer in we might not have been able to steam clear of the nets. The region off the mouth of the Fraser is at times very well covered with nets, and a large amount of fish must be taken there. They say that this outside fishing has not been carried on except for a few years.

Canadian boats are not allowed to fish on the American side. The Custom's Inspector, Webber, says he has orders to seize any Canadian boat found on the American side unless she conforms to custom's regulations. This is based upon a custom's law, not a fishery. He has poor means of making any seizures. Point Roberts is not a port of entry, and all Mr. Webber can do is to inspect, and give a certificate of contents of cargo, such as a barge of fish. Then the tug has to go to Blaine, to enter and clear. Any teams crossing the boundary line at Point Roberts have to report to him. There has been much smuggling at this point (Dr. Wakeham says opium and Chinese). The operatives in the cannery at Point Roberts are mainly Chinese. The men who work the traps are white.

The elevation of the land at Point Roberts is about as indicated on the Coast Survey chart. The land is somewhat low over the southwest corner, and there is a short sand spit at that point. High land comes in and occupies the southeast corner, and extends in a broad belt northwestward, occupying most of the point and extending across the boundary line and some distance into British Columbia. This high land according to Mr. Ladner, reaches an altitude of 100 to 200 feet. It is thickly covered with trees and undergrowth. It consisted in such places as we saw exposures along the east side of horizontal layers of compact sand, possibly decomposed sandstone. In many places there were more or less vertical exposures, in which the horizontal layers were well shown. In places names in large letters, and also some Indian characters had been cut rather deeply in these surfaces. They looked as though freshly



made, and yet the surfaces may be more durable than they appeared from below. They were all so high up that we did not have time to examine them closely. Some distance before reaching the boundary line, the high land has left the east coast, and there is low land, partly wooded. This is a favorite camping ground for Ladner, New Westminster, Vancouver and Victoria, the water being warm enough for bathing, but the beach not very good. A large area was covered with tents, and there were also a few small frame houses, very crude. This summer settlement crosses the boundary a short distance.

A few clearings have been made on the high land, but all occupying land there now are squatters, the land not yet having been surveyed and opened for settlement. There is said to be a good soil.

There is a good beach all around the point, and we were told that it everywhere passable at

high tide, although in some places we found only a narrow strip dry, the tide being high as we passed along the east side. There is a great deal of drift stuff everywhere on the beach, some of it being of very large size.

Clams of 3 or more species, cockles and cancer magister are very abundant, judging from the number of remains cast upon the beach. The Indians were preparing the large clams, and they were also smoking salmon. They seemed to be smoking or roasting the clams which were fastened on sticks and placed in front of a brisk burning fire.

There were quite a number of Indians encamped about where Goodfellow was located. The Indians in this place do not take the part they do on the Fraser River in respect to the salmon fishery. They are not considered an item in this fishery.

They fish only with their special nets on the ledge off the southeast corner of Point

Roberts, and now the long string of 3 pounds belonging to the A.P.A. Co., runs so near the ledge, if not over it in part, that they can get very few fish. They had been fishing as we came up, but stopped then, and had caught no fish. They sell to the canneries, and must save a few for their own use.

The traps are an economical method of fishing where they are well placed. Some of the traps are well located and take a large number of fish, thereby reducing the cost of their capture far below that by drift nets. Mr. Ladner said  $1/2$  less, and others made them even cheaper. This could scarcely be a fact, however, unless the fish were running well. Judging from remarks that have been made, I am confident that the actual bone of contention is right here. The cannery on the Fraser River have a less direct interest in the preservation of the fish (against their destruction at Point Roberts) than in the compe-

tition in their cost, and, in fact, Mr. Ladner practically confessed so. Paying their drift net fishermen on the Fraser the prices they have to, they cannot put up salmon so cheaply as those who are running successful traps on Point Roberts. Mr. Ladner said that if the traps were continued on Point Roberts he would advocate their use on the Canadian shore of the Gulf of Georgia. Unless they were allowed to use them there they would no longer be able to compete in the markets with their canned salmon.

The harm done by excessive fishing at Point Roberts will depend upon the closeness the fish as a whole trim the shore there. The best fishing places for the traps are evidently the southeast and southwest corners of the point. On the former there is a trap with 3 pots leading about  $1 \frac{1}{4}$  miles off shore. It makes a large catch, and must be a complete barrier so far as regards any fish which come along within that distance of the shore. The fact that salmon still run abundantly

in the Fraser River, and that no decrease is acknowledged there would indicate, however, that the traps are not stopping all the fish, and to my mind indicates that only a small part of the fish strike in close along that shore. There is no doubt that the fishery at Point Roberts may readily be overdone, and much harm result in time if the fishing is not regulated there. While the number of traps has not been increased this year, they have evidently been made much more destructive, much more perfect, and the long trap of the A.P.A. Co. runs up to high tide level on the beach. This is a hindrance to navigation. No fishing boats can pass along without going way outside of the string.

It should be remembered in connection with this matter that Canada in a measure controls the situation as we do in the fur seal case. The Fraser River seems to be the only spawning ground of the sockeye in this entire region, and by

stopping their hatching work or allowing more license for fishing they could soon ruin Point Roberts.

As a fact, however, the greater amount of fishing is done on the Canada side. Over 30 canneries are operating on the river. They receive a relatively small amount of fish from the Point Roberts' traps, very nearly all coming from the drift nets. Otherwise the traps on Point Roberts supply only two canneries, the one located there and the other at Semiahmoo. If the traps are greatly restricted Canada should make some restrictions on the amount of their fishing.

At Point Roberts saw the Indians fishing on ledge off the southeast point, using their dugout canoes, with long nose. Employed their square net as described by Alexander, cutting a passage through the kelp. Two canoes to a net, and about a dozen canoes, out as we came up. They stopped fishing

then and had taken nothing. The big trap of A.P.A. is said to have destroyed the fishing on this ledge. It comes out nearly to the ledge, and possibly covers a part of it.

The canneries on the Fraser River are mostly located from Ladner's down. There are many on the south side from Ladners to the canoe channel, but the largest cluster is at Stevestons, where they are close together. There are only about 6 above Ladners, and a total on the river of over 30 now.

The cannery at Point Roberts is located on the east side just above the southeast point, their large trap coming in just south of it. There are two buildings, on a wharf level with the flat land back of the beach, and on this land back of the cannery are other buildings belonging to the A.P.A. Co. including quarters, mess, and store. In a part of the latter is located the Customs Inspector, Mr. Webber.

One of the cannery buildings is on the end of the wharf. The fish are received here, cleaned and cut. They are then carried in a small cart to the other building which is at the inner end of the wharf, where the canning processes are carried on. The cannery is a large one, but not as perfect in its machinery as Ewen's on the Fraser River.

The wharf is very high. We landed at low tide, and had to climb a very long ladder up the piles. I should say the wharf was high above high tide. The tides must be about 15 feet here, but did not find out.

A large scow was tied alongside, which they were filling with salmon to tow over to Semiahmoo.

Albatross. Unless information can be obtained from Drysdale, have Albatross go to Point Roberts and make careful plotting of all the pounds.

Also take photographs, if possible, showing



cannery, the principal pounds, and the general character of the land.

The traps at Point Roberts are on the same general principle as the pounds on the Great Lakes, but they have been specialized to meet the conditions.

They consist of a leader, heart, tunnel and pot. Notes on this subject will be found in the interviews. The pots and hearts are large.

The special feature of the net is an extension from one side of the heart, that on which the fish are expected to run, to turn them back in case they miss going into the heart on the first lead. These extend from the outer angle of the heart as shown in drawing, and are of different lengths and directions to meet the conditions prevailing at the spot. They make a square turn at the end, and are sometimes so long, as to greatly increase the size of the body of the trap.

Dr. Wakeham and Mr. Ewen think floating traps would be better suited to the circumstances, would catch more fish, and would be much cheaper. They are used for salmon on the east coast.

July 22, 1895, left New Westminster, by way of Brownsville, B.C., for Blaine, Wash.

At the latter place expected to see Mr. Drysdale and John Elwood. On arrival there found Mr. Drysdale at station bound for Seattle, on account of illness. We therefore went along with him. We did not see him in Seattle, however, as he was too sick (?) all the time, We think he did not want to see us.

Reached Seattle the same day and remained there until the morning of July 24. Saw Mr. Myers of the Myers Canning Co. (See interview), and Mr. Ainsworth of Ainsworth and Dunn.

Myers has the only cannery at Seattle, and the most southern one on Puget Sound. Belongs at Portland, Or., and is at Seattle only during canning season. He is a good friend of Drysdale and apparently tried to pump us on his behalf.

Ainsworth & Dunn are fresh fish dealers. There are 2 or 4 other similar concerns here.

Mr. Ainsworth showed us such fish as he had on hand, steelhead, one or two other kinds of salmon, Dolly Varden trout, common western trout, halibut, white sturgeon, halibut and smelt.

In a fish market up town saw good sized prawns which came from Puget Sound, and large crabs from Dungeness.

June 24, went to Fairhaven, to see John Elwood and Judge Winn. They were both out of town. John Elwood could give us the history of salmon fishing in Puget Sound, especially about Point Roberts. Judge Winn was the one who interpreted the state law regarding Puget Sound, as not applying north of Puget Sound properly so called. He also has a good acquaintance with the tide land question. These two men are located in Whatcom.

In Fairhaven saw Mr. A.J.Kerr, of Kerr & McCord, attorneys for the Indians at Point Roberts. He gave us the main points in that controversy.

July 25, left Fairhaven and went to Vancouver

where we spent the night.

July 26, at 1.30 p.m. took steamer Cutch and went to Nanaimo, where we arrived at about 5 p.m.

July 27, 1895, Nahaimo. Saw George Marsh, the only fish dealer there. He came over from England where he had been a fisherman. Was in Winnipeg for a time. Then in Victoria and now is in Nahaimo. Fishing is on a very small scale from Nahaimo, only for local trade and domestic use. He had no fish at all today, although several customers came in.

As to the fishing during Sunday night July 21, which we saw commenced while we were in New Westminster, the Captain of the Government launch under Mr. McNab said that the boats on the Fraser River that night made an average catch of about 150 salmon to a boat.

July 27, 1895. Left Nanaimo in the afternoon and reached Victoria in the evening by railway. Put up at the Driard Hotel and remained there through July 31. Interviewed Captain Gaudin, Agent of the Department of Marine and Fisheries; two captains of the steamers engaged in halibut fishery; Mr. Green, engineer; several gentlemen together, interested in the canning business, namely, Trotter Johnson, Mr. Riplet, Mr. Todd, Mr. Earle, M.P. Visited several of the fish markets.

July 31. In the evening went by steamer City of Kingston from Victoria to Port Townsend. Remained there until morning of August 3. Dr. Wakeham left me here August 2, and returned by way of Victoria. Interviewed Judge J.G. Swan, Joe Cates.

August 3. Morning left Port Townsend, and went by steamer to Port Angeles, reaching there about 2 p. m. Interviewed Mr. J.W. Hume, who has started cannery here this year, and Johnson, who has fish market.



PORT ANGELES, WASH., AUGUST 4, 1895.

Saw only two species of clams which are used here, one closed, the other open. The former is the species most commonly used. In fact the latter seems to be scarcely used at all. The Indians about here do most of the clam digging, and peddle their catch. There is no other business with them. The wide beach at this place seems to be full of clams, but had no means of digging. They were squirting all over the beach as the tide went out. Specimens are saved and marked.

The big crab does not seem to be very abundant in front of the town. At least I did not see many, although the beach here is just such as they would be most likely to inhabit. The principal place where they are taken along this shore is around Dungeness and between there and Fort William. It is said that most of the crabs which go to market come from that locality.

The shore from Port Townsend to Port Angeles

is backed by cliffs of rather soft material, and the beach at most places at least is wide and sandy. I do not know how much further down the shore these conditions prevail.

The big crab would undoubtedly be found all along this shore, but probably is more common in some places than in others. In case of a good demand the crab and clams should furnish a profitable industry.

There are said to be no oyster beds along this part of the coast. Possibly too salt water and too much sand.

Trout are common in the salt water along this shore. Feed on small fishes, and will sometimes take the fly. Saw several off the wharf. They were small.

Saw specimens of *Cyanea* (?) and *Aurelia*. The former measured about 18 inches across disk. The latter was about common Atlantic size. *Asterias* are common on bottom and on piles. Saw

one Pycnopodia on bottom, about 18 inches in diameter. There is a worm with large tough tubes growing in great clusters on the pilos above low water mark. Barnacles and Mytilus are common on piles between tides, growing in thick masses. Teredo is very destructive here and they also apparently have one of the small boring crustaceans judging from the surface appearance of the piles in places, but I could not get to them.

There were some small fishes about the wharves, but not many, and very few varieties.

All the information so far obtained indicates that the sockeye does not move along the south shore of Fuca Strait unless it may be toward the mouth of the strait. Much weight should probably be given to Mr. Hume's statement in this regard, as he would have found out the presence of this species here in his search for information and in his actual operations.

His further statement that the cannery es-

tablished at Clallam sometime ago failed because they could not get fish would indicate that the sockeye does not even come in in bodies at Clallam. Our evidence does not show, moreover, that the sockeye runs continuously along the Vancouver shore. Becher Bay seems to be the outermost point where they have been observed abundantly, and is it not possible that they may keep away from the shores until they reach the inner end of the strait.

The Albatross might work in the Puget Sound region in the fall until into December and even up to Christmas some years. September is sometimes bad. From January on and including the early part of the spring the weather is bad.

LIMNORIA --PORT TOWNSEND. AUGUST 6, 1895.

This morning made an examination of the piles under the wharf of the Great Northern Co. below the Central Hotel. Limnoria is very destructive here, working between high and low tide, the maximum of harm being caused probably a little below mid-tide level. From the piles as they stood, I could find few traces of Teredo, which was quite natural, as I could find no cross sections. They say, however, that the Teredo is very common here, and they lay the destruction of their piles to that animal. The Limnoria, however, had produced all the visible damage, eating into and honey-combing the piles, which were sloughed off to variable extents, finally cutting the pile in two. All the piles were more or less affected by it, and the most were badly damaged, many being cut completely through. In some cases only the lower part of the pile was

standing, the upper end projecting a short distance above water, irregular in its shape, and covered with the honey comb.

From this general observation it would look as though the *Limnoria* was more destructive here than the *Teredo*, all the actually damaged piles being those eaten by this crustacean.

A glance under other wharves indicated that the same cause was operating there.

I saw a few hard *Teredo* tubes sticking out of some of the eaten surfaces of some of the piles, but none were near enough to reach.

Specimens of *Limnoria* and wood have been preserved in alcohol.

There is a great wealth of life on the piles at and below the water surface at low tide. Most conspicuous were *Asterias*, *Pycnopodea*?, white anemones, large worm tubes, barnacles, *Mytilus*, hydroids, bryozoans, etc. The piles in this region would furnish excellent collecting places.

August 5, 1895, returned to Port Townsend where we remained until August 7, in order to take the steamer Lydia Thompson on the morning of that date for Friday Harbor. She had not arrived at noon, and as it was evident something had happened to her we took the noon boat for Seattle.

While in Port Townsend this time interviewed a halibut fisherman whom we found at Joe Cates' market. Also interviewed Judge Swan with respect to the mollusks of the coast. Tried to find Captain Oliver, an ex-sealing master, but he was away from home. Some others whom we wished to see were also absent. Examined piles under the wharves, on which notes are given elsewhere.

Reached Seattle in the evening of August 7. Found a letter from the Acting Commissioner, enclosing copies of letters from Captain Wm. D. O'Toole, Register of the Land Office at Seattle, and W.P.C.Adams of the same place, relative to



destruction of fish by the salmon traps on Puget Sound.

August 8, in the morning saw Captain O'Toole, and had a long talk with him. He knows nothing personally about the fishery, and only aided Mr. Adams in getting his letter to Washington.

Mr. Adams' complaint, he said was not directed against the catching of any quantity of salmon in a legitimate way, and where they were used, but to the wasting of fish, many of the salmon being thrown away, as off color, etc., and large numbers of other kinds of fish being taken and thrown away. In fact, the complaint was just as given in Mr. Adams' letter.

Mr. O'Toole said that he could not explain exactly the status of Point Roberts. It is evidently still a military reservation, but whether to be kept so or not he could not say. However Mrs. Waller's claim is good so far as the decision of the Interior Department goes, as I was shown

a letter from the Acting Secretary, in a case of Goodfellow against Kate Waller, deciding in the latter's favor. She, therefore, has the holding at present for whatever it may be worth, and the A.P.A.Co. is also secure in its lease from her to the same extent.

Captain O'Toole took me to the place where Mr. Adam's mail is left, but he was not in, and we left a note to him, asking him to call upon me at the hotel this evening.

I have tried also to find Judge Brinker, U.S.Attorney, and Judge Hanford, of the U.S.Court, but they were both out of town. I desired to talk with them about the status of affairs at Point Roberts.

Seattle, August 8, evening. Mr. W.P.C. Adams called upon me. His information was hearsay, having been obtained from Mr. Egan. Furthermore, Mr. Egan's knowledge was all obtained from Mr. Jackling. Mr. Adams had never seen Jackling,

and the latter has no knowledge of the letter sent to Washington. Mr. Adams will try to arrange to have Mr. Jackling see me. W.B. Jackling is engineer and Harry K. Struve, captain of the Str. which carries fish at Point Roberts.

Mr. Adams added nothing but what was contained in his letter. He seemed to think the mesh of the salmon traps should be large enough to allow the herring to escape. They report large quantities of herring caught in them. His chief complaint is the destruction of white salmon and of all other species taken. They are not set free alive.

August 9, left Seattle at 2.45 p.m. on the "Flyer" reaching Tacoma a little after 4. Saw the Secretary, and the President and Treasurer of the North Pacific Fish Co. The former being Edward A. Chase, formerly of Portland, Me., the latter Wm. Biglow, formerly of New York. The firm has been organized less than 2 years. Mr. Chase is the active partner as regards fish, Mr. Biglow having had no experience in that line before. They succeeded an older company which failed to be successful. Had along talk with Mr. Chase. He says that there is very little oystering here compared with Olympia. Told me to see in the latter place John G. Gale, and J. Graham.

They have been shipping considerable halibut overland from here, but apparently do not approach Seattle in the extent of the business. This is the only wholesale firm in Seattle.

August 10, a.m., went to Olympia by R.R. from Tacoma. Saw Secretary of State, J.H. Paine from whom I obtained MS. copy of state laws, as they exist at present. Shorthand copy was made of the more essential parts. Mr. Price is preparing a report on the resources and statistics of Washington, and all Fish Commission papers relating to the State will be acceptable.

Saw State printer from I obtained a copy of Goodfellow's bill which passed the House, but not the Senate last winter.

August 10, p. m. returned to Seattle by R.R. reaching there about 7 P. M. Remained over night, and took 9.15 a.m. train for Fairhaven.

At Seattle saw several persons interested in the marine natural history of the region, the study of which they have recently taken up. Mr. Meary, Secretary of the State University was present, but not actively interested.

This was at the rooms of the Young Naturalists Society, where they have brought quite a collection together, but they have little money, and things are not yet well arranged. Have their own building. Have been doing much dredging lately, and their marine collection is quite large for a beginning, and contains many interesting things.

The principal one seemed to be H.H.Hindshaw, who is Curator of the Arboretum of the State University, Seattle.

A young man, Trevor Kincaid, has started in to make a specialty of annelids. He has been an amateur entomologist. Is very highly spoken of and deserves support. Is librarian of the Society, and an instructor in the State University.

Prof. O.B.Johnson's marine collection is at the same place, but he is now practically incapacitated for work by rheumatism.

August 11, reached Fairhaven at 1.22 p. m.

In the afternoon saw John Elwood, and made arrangements with him for interview in the evening, which was held.

August 12, 9 a.m. took "Bay City" for Friday Harbor where we arrived at noon. There is a cannery there, owned by the Island Packing Co., John A. Devalin representing or being the concern.

Had interview with Devalin, with an Indian, John Thomason and Mr. Jensen, a business man.

Left Friday Harbor August 13, noon, and went to Fairhaven.

August 14, took steamer "State of Washington" from Fairhaven to Seattle, at 9 a. m.



New Westminster, B.C., Sunday July 21, 1895.

By law there is a close time each week for salmon in the Fraser River from Saturday at 6 a.m. to Sunday at 6 p. m.

This evening had the opportunity of witnessing the beginning of the week's fishing from the height along the river front. When we reached there it was only a few minutes past six, but most of the nets were in. They must have anticipated the time by some minutes.

There were somewhere between 40 and 50 boats in sight in front of New Westminster, from the island below to the turn in the river above. The most of the boats were off the lower part of the city. Boats all small, of different kinds, generally with 2 men. Saw at least one boat with 3 men. The buoys in nearly all cases were square tins, like oil cans, looking very bright in the sunshine. The scene was very animated.

Occasionally a salmon would jump, and one sturgeon was seen to leap from the water.

In some places, especially below, the boats were pretty well together, and must have had difficulty in keeping their nets apart. There was no such trouble directly within our view.

The evident intention was to keep the nets across stream, but very few nets were well spread out in that direction, being more or less drawn up or down stream, or into irregular shapes, and several laid directly up and down. This was due to the irregularity of the current, or its inequality in different places or on the two sides of the river. It is stronger along the New Westminster side, owing to the curvature there, sometimes the buoy, sometimes the boat was most down stream.

Evidently some of the fishermen were novices and did not know well how to manage, allowing the currents to have their own way, whatever the re-

sult. It may be said simply that the nets trended in all directions, and were more or less curved unless stretched up and down stream, when they tended to become straight.

Salmon were evidently abundant, judging from the catch made by two or three boats, which lifted near enough for us to see the fish taken for a while, although soon carried too far away to make out much. One boat took 25 before the net was entirely lifted. Then we could not see farther. Other boats seemed to be taking them quite rapidly. The lifting we saw was done between 6.30 and 6.45, that is 30 to 45 minutes after the nets were set, and at this rate a very large catch would be made during the night. In fact, it would seem impossible for the boats to operate long, as they must soon fill with fish, unless some of the cannery boats relieve them. Boutilier's launch left the wharf and went down stream, and we also saw another launch farther down.

This abundant run of fish must be the one announced at Point Roberts Friday afternoon, and in the lower part of the river Saturday. The paper tomorrow morning, July 22, will probably give some account of the catch.

Captain Adolphus Peel, New Westminster, who has been taking physical observations there for many years, says the sockeye begins to run up stream on a temperature of 58° F. He has not taken many water temperatures, only at the time of beginning of this run.

Mr. Ewen, New Westminster, says the sediment in the river consists of mica sand, and he speaks of the river as being milky. This material is so fine that it is held a long time in suspension, and yet in eddies it will deposit, and this occasions the many shoals, which change their positions frequently.

Friday Harbor, Washington, August 12, 1895.

Saw alot of salmon landed at cannery of Dev-alin. They came from his traps at the south end of San Juan Island. They were brought up partly on bow of steamer and partly on scow. Those on steamer had been selected out and consisted of sockeye and a few tyee.

Those in scow were just removed from trap.

There were about 1000 or 800 on tug. On scow about 1800 or 2000. Of the latter not 1 in 20 were sockeyes perhaps not 1 in 30 or 40, the balance being humpbacks. The latter were all thrown overboard. There may have been 60 to 75 or 100 sockeye on the scow. There must therefore have been several thousand (10,000 - 20,000) at this rate of humpbacks culled out from the sockeye carried by the tug, at the traps, this enormous number being thrown away dead, - a fearful waste. It would seem to be impossible, however, to separate the fish when alive. Can they not,

therefore, be utilized?

There were 40 to 50 tyee, from 8 or 10 to about 40 lbs. each. As there are so many white fish coming there Devalin does not can them, but they are sold to an agent for Ainsworth & Dunn who ships them to Seattle. This species seems, therefore, not to be wasted here, as the white meated ones are at Point Roberts.

There was one green sturgeon in the lot, which was given to the Chinese. Also a large <sup>reddish</sup> gadiod, with continuous dorsal fin. Nothing else but salmon.

While the sockeye averaged larger than the humpbacks, many of both species were of the same size, and size could not be used as a guide in separating. There is quite a difference in the shape of the body, the upper outline showing more or less of the hump. But when these two species are mixed together they are best distinguished by the scales, those of humpback, being much smaller than sockeye.



The humpbacks are much softer than sockeye, and in the scow all under the first layer were badly misshapen by pressure, and in very poor condition. Some were given away to 2 or 3 persons, but the pile was thrown overboard. The scales come off from humpback very readily, and nearly all were more or less bereft of scales. On sockeye the scales cling quite firmly, and the scaling is generally perfect.

They do not seem to regard pollution unfavorably, throwing over so many salmon into the water, but, of course, this is far distant from the fishing grounds.

There are vast quantities of very small fish, looking like young herring, around Devallin's wharf. They are darting about and seem to be feeding. I first supposed they might have been attracted by the refuse from the cannery, but they are just as abundant, and feeding the same at the Government wharf, 1/2 mile away.

FRIDAY HARBOR, AUGUST 13, 1895.

I was informed this morning that the total number of salmon brought in last evening, as described above, was about 4,000. In addition, during the night Mr. Devalin's other tug came in from the north with 1,500 salmon, as he told me. This morning, however, the fish had all been put up at an early hour.

Mr. Devalin gave me the location of some traps. His two are off the south end of San Juan Island, about as I have indicated them on the chart. The scale is too small to place them exactly, but they are some distance offshore.

One trap on Henry Island near Roche Harbor, owned by Wm. Shultz and Samuel Gross.

The traps on Lummi Island have taken no salmon.

In 1894 an elaborate trap was built at Sandy Point on the mainland, north of Lummi Island and fished that year but took no salmon (sockeyes?).

The salmon move with the tide; they never fight against it.

Anacortes is the center of quite an important codfishery, the fish being brought here from outside for preparation.

REV. T.L.DYER, COUNTY SUPERINTENDENT OF  
SCHOOLS FOR SAN JUAN CO., FRIDAY HARBOR, WASH.,  
AUGUST 13, 1895.

Had a talk with him while making passage  
on the "Buckeye".

Told me of two lakes on the east arm of  
Orcas Island.

Constitution Lake is near east side of is-  
land, below Mt. Constitution. Has an outlet di-  
rectly into the sea. Altitude 1200 feet above  
the tide. Outlet very precipitous, with some  
tall falls. The lake and surroundings are very  
beautiful, picturesque and wild. Several small  
ranches are located about it. There is no sign  
of fish life in this lake.

Cascade Lake is on the west side of the  
east arm of the island and empties into the east  
arm or bay. Altitude above tide 365 feet. Its  
outlet is also precipitous. The only fish known  
to have occurred are small minnows, which have

been seen in a ditch which connects this lake with Constitution. A few trout have been planted in Cascade Lake but nothing has been seen of them since.

The ditch referred to is in large part at least artificial, in order that the mill on or about Cascade Lake may draw water from Lake Constitution. Both lakes are very deep.

Cascade Hotel for summer visitors which stood near Cascade Lake has recently burned.

Lake Constitution is larger than Cascade although not so represented on the Coast Survey chart.

San Juan Island has a lake called Sportsman's Lake, about 4 miles out from Friday Harbor. Outlet runs to northern side of Island. This outlet for a large part of the way is an artificial ditch through marshy land. The lake has no native fish. Carp were planted in it a few years ago, and one is occasionally taken now. That is

the only species it contains and doesn't know why trout do not ascend from the sea. There is a small fall, but not high enough, he thinks, to keep out trout.

Trout Lake, 3 miles farther west than Sportsmen's Lake, has an outlet on west side of Island, and contains trout.

There is one herring trap on the west side of Waldron Island, north of Sandy Point. It belongs to Thomas Bros., who have been putting up herring the past 4 years, chiefly smoking, some salted. This is the first year they have used a trap; previously employed drag seines. Run lasts from May to September. As fine smoked herring as he ever saw.

There is also a herring fishery on Stuart's Island, run by Mr. Mordhorst. Use drag seines.

One salmon trap was placed last year on the west side of Lopez Island (at the point marked x on the chart). It was fished all the season.

About all they caught were a few tyee, and about 50 specimens of other species.

In 1894 also a salmon trap was built at the south end of Lopez Island (marked x), but it was not a success no salmon being taken. It was inside of the small island. In 1893 salmon had gone through that passage in immense numbers. Sockeye, and that was the reason for putting in the trap which failed in 1894. There is a strong eddy there, and it looks as though a few switched off there in 1893 instead of all keeping on their regular course.

A salmon net was tried in 1894 somewhere about Stuarts Island without success. Many sockeye go by that island and are taken by the Indians in their reef nets.

While the humpbacks have not as good color as the sockeye they are a very good fish salted, and they should not be destroyed in the manner now practiced.

Halibut on all the inner grounds are much  
scarcer than they were just a few years ago.  
Has seen them bring in great boat loads from the  
pounds where now they get only a few.



THOMAS E. LADNER, LADNER'S LANDING, B.C.

July 18, 1895.

(Interviewed by Wm. Wakeham and R. Rathbun.)

Of the Victoria Canning Company, Limited, of British Columbia. He is Vice-President of the Company. Has had experience since 1878.

Q. What kind of salmon do you have in the river?

A. The salmon of commerce is the quinnat, sockeye and coho. We have the dog salmon or quallock, and then we have the humpback salmon. The humpback salmon and the dog salmon, they can them at Point Roberts and they can them at the Sound for the American market, but as we do not have the American market and, consequently cannot can them here. I think they send them down to the southern states where they want cheap fish.

Q. Which is the best of those?

A. Another thing, we have what we call the steelhead. It is a lovely fish. But they are

not a salmon of commerce and at the same time are not very plentiful. The best salmon, the salmon that are the most delicate canned, it is a question of opinion. I claim that they sockeye is the most delicate salmon canned, and undoubtedly the best color. But the spring salmon is the salmon which is the same as the Columbia River salmon, but the color is not so good. Our quinnat salmon here, strange to say, at times, the greater part of them are white; some are pink; some one side pink and the other side white, and others are threaded with white. You cannot, by seeing them alongside of each other, - I will defy any one to say which is white and which is red, from the outside; but I think the flavor is fully as good to one as the other, but the appearance, they do not take. I canned about 700 cases of the white salmon one year, but could not get a market for them. We sent a lot to England once, but they would not look at them at all.

Q. The coho, what is the color of that?

A. It is a pale red. It is off color from the sockeye.

Q. Which of the salmon are speckled on the outside?

A. Of the salmon I mentioned, the cohos.

Q. No. Of the 6 salmon you mentioned, which have spots on the outside of the body?

A. The cohos.

Q. Do the quinnat?

A. Some do and some do not. You will see spots on their tails. But the cohos all have spots on them, and those are the only ones. The sockeyes have none. They are a kind of bluish-green black. The steelhead has spots, but the dog salmon has not. They have stripes on them, rainbow stripes.

Q. When do the salmon run? the quinnat, for instance.

A. Well, the quinnat salmon run, - well you can catch them almost every month in the

year, but the principal run is in the spring.

They run some in February and March, but principally in May and June; and then we have another run after the sockeye run, which are fully a greater run than the spring run. The spring run of them, the run that comes in May or June, are a great proportion of them red, and what comes in after the sockeye, the first of them, there is about 10 per cent white; and then they work on and off until they get about 10 per cent red, and then work off and get white afterwards. The very last of the fall run are white, and there is not the least doubt that they are the simon-pure article, because we catch them way out on the sandheads in the salt water, and they are white there. And another thing, in the Skeena River I was told, there is two branches to the Skeena River, and one branch, the Skeena River proper, they are red salmon, and this other branch - I cannot think of the name, some Indian name - we do not find the red salmon in that

branch, nothing but white, and the white ones are all there, so that they run into these branches, and it seems as though each salmon has his particular branch of a river to go to, and each has his particular river.

Q. The quinnat is found in salt water here in all months of the year?

A. Yes, in all months of the year, off Victoria and down off Nanaimo.

Q. That would look as if they might not go way out to sea?

A. Yes, I should judge they were a fish that had bred and grew close to this north shore.

Q. Well, now, the sockeye?

A. The sockeye is a fish that it is very hard to tell where they come from, because we first hear of them at Barclay Sound, up the coast and then they come down along the coast to San Juan Bay and Straits of Fuca, and then Beechy Bay, and also, we often have them in the river here before they are reported in Beechy Bay;

and then they come up along the coast and strike in about Sandy Bay and East Point on the other side, and strike in around through Boundary Bay, and strike Birch Bay Point, and so on up to the Fraser; but they never go up to Burril (?) Inlet. They have never been known to go up there but once or twice. This last few years since the traps have been at Point Roberts they have been known to go in there, and the supposition is they have been broken up and lost.

Q. What is the period of their run?

A. There is a run that comes in about the latter end of May. They go to Pitt Lake. There is only a few of them and we never bother with them. I have known them to commence here, a good run of fish on the 4th of July, on the Fraser, and they ran then, that year, until about August 10. Now, they have kept working off until they do not get in here much before the 20th of July, and they run on up to the 4th or 6th of September.



Last year they ran up to about the 6th of September; we had a good run between the 25th of August and 6th of September.

Q. You do not see them in the salt water except at that time when they are approaching the Fraser River?

A. No.

Q. How much earlier are they reported at Barclay Sound?

A. The reports we hear from Barclay Sound are conflicting, but the reports we hear from Beechy Bay and San Juan is generally about 2 weeks before they get here, and the early run would be 5 or 6 days before the traps were in over here. We used to have the early run in at Point Roberts, we calculated about 5 or 6 days before they got to the Fraser River, and the latter part of the run, they will get here inside of 24 hours. I have seen them here, - fish running - It was in 1879 I think, I saw fish running here; catching 200 or 300 to a boat, and I think

it was somewhere in the beginning of August, from the 5th to the 10th, and the next day they could not catch 5 fish to a boat. They just cut right off, like as though they had been carved with a knife.

Q. When does the coho run?

A. The coho commences some years earlier than others. Last year there was a good run of cohos about the 10th or 12th of September, but the 10th to the 15th of September is about the time they commence. Sometimes we catch quite a number of cohos in the latter end of the run of sockeyes, mixed with the sockeyes.

Q. How long will the cohos continue to run?

A. Until about November, sometime in November, some years later than others. Speaking of the quinnat salmon, I have known instances where the quinnat salmon run right through the sockeye. Every day the boats had 1 or 2 quinnat with the sockeye. And cohos will come in, perhaps when



the sockeyes are about half done running the cohos will commence to run, right with the sock-eye.

Q. And then the humpback?

A. This year is the year for the humpback, and when they come in they come in very thick.

Q. You say you do not do anything with them here?

A. No, nothing at all. Some fishermen catch them and smoke them and some salt them, but we do not can them at all. White men catch them and smoke them and put them on the market.

Q. When do they run?

A. They come in with the latter end of the cohos; when the cohos are about half run out they come in. A boat will go out and catch about 25 or 30 cohos, and perhaps 2 or 3 humpbacks, and then they continue on afterwards for about 6 weeks.

Q. That would be from what date to what date?

A. They commence about, say the 1st of October and run up to the 1st of November, and perhaps a little longer. We do not handle them at all.

Q. The dog salmon?

A. The dog salmon runs very similarly to the humpback, at about the same time, only on other years; there are a few run every year, but when the big run is on is off years from the humpback.

Q. What time of year do they run?

A. About the same time of year as the humpbacks.

Q. Now, the steelhead?

A. They run pretty much all the year through, just the same as the quinnat, with the exception that along the latter run, what we call the fall spring salmon run, the steelheads run principally with them. Their principal run is from the time the sockeyes quit; from the 1st of September until the 5th or 6th of October.

Q. Do they run in the winter at all?

A. Yes, they catch them all the year.

This spring they caught quite a number early in the spring.

Q. You were speaking about the periodicity of fish, that is, some years running more abundantly than others; what can you say about that, of the different kinds of salmon in a general way?

A. That is a thing that I cannot really - The quinnat salmon as a general thing are pretty regular; once in a while there will be a little bigger run than others; but the sockeye are the salmon I think have a cycle of 4 years. Inference leads me to infer that it is either 4 or 8 years, but I think it is 4. But the reason of those 2 short years I cannot form an idea, unless there should have been a time sometime when the fish have gone up into very high water in large numbers, and the water kept up for a very long period and the spawn got stranded, and destroyed

them in that way. On these short years they are the sockeye, but a different kind from the big years. I should not say a different run; they are the same kind of fish, only they are larger. For instance, in a big run it takes from 12 to 13 to make a case of salmon, and I have known them these off years run down to 9  $1/2$  or 10 to a case of salmon.

Q. With the cohos and the dog salmon, you said they had alternating years?

A. Not the cohos; the dog salmon and hump-back.

Q. Do they have 4 year periods?

A. I think so, I think they all have 4 year periods, but I think the cohos have about a 6 year period. About every 6th year we get a better run than others.

Q. With the sockeye, when do you expect your 4th year to come next?

A. This year. There is one year that is an extra good year, that is in 2 years from now.

That would be in 1897? Then the next year after that has always been a good run, almost equal to the other one, only shorter duration, but last year it was a good run only it was of short duration, lasting only about 4 or 5 days.

Q. In the year of greatest abundance the run lasts longer?

A. Yes, as a general thing.

Q. When is the humpback run?

A. This year.

Q. Which of these salmon do they take at Point Roberts?

A. They take the sockeye. They take some quinnat, but not many; not as many as they do here. You know they are a much scarcer fish. And they take a lot of dog salmon and cohos, and they take any amount of dog salmon and humpbacks both.

Q. And the steelheads, do they get that there?

A. They get some, yes. They are a fish



that are not every plentiful as a merchantable fish. They are more of a river fish I think, they do not appear to catch them outside much.

Q. Do they get any sturgeon in the pounds at Point Roberts?

A. Oh, yes, quite a number. I do not know what they do with them.

Q. They dont save the caviar?

A. Well, some save the caviar, but not all of them.

Q. After you take the quinnat and sockeye, how abundant are these different kinds, relatively, in the river?

A. The humpback are very abundant, more so than the sockeye; about the same as the sockeye in a very big year. The dog salmon are very abundant, but not as abundant as the others. The cohos are not abundant. The cohos are about the same as our fish will be this year. A man who goes out and catches 40 or 50 thinks he had done pretty well, and sometimes they come in with 10

or 12.

Q. How about the sturgeon in this river, is it much of an industry?

A. Well, yes, there has been considerable of an industry of late years, but the manner in which they are catching them I think will exterminate them, that is with the naked hooks. I have seen the Indians go along the river with a long palâ in a canoe, and on the end of the pole a spear, and they will go down the river with those poles, and the first you know they make a dab and they get one, so they must be pretty plentiful.

Q. The sturgeon fishery is relatively a new one on the Fraser River?

A. Yes. I saw a sturgeon caught at the time Lord Duffin was here weighing 1400 lbs.

Q. Who are the principal operators on Point Roberts now?

A. The Alaska Company, they are the operators. They bought Drysdale out last year.

Drysdale owned the cannery at Semiahmoo.

Q. Who else is there at Point Roberts beside the Alaska Company?

A. Well, there is Goodfellow and Wright and another man. There are 2 others, but I cannot think of their names. There is but one cannery there and that belongs to the Alaska Company. But it originally belonged to Mr. Wadhams, but he sold out last year.

Q. Then Mr. Drysdale's interests were not on Point Roberts at all?

A. No, only he owned traps there. He owned traps there before he sold out to the Alaska Company. That is the only interest he had. He caught fish there and took them over to the cannery. Traps were originally started there by a man named Waller. He was a Province man, coming from New Brunswick somewhere, but he sailed out of Boston for a long time and San Francisco.

Q. Do you know when that was?



A. That must have been in 1878 or 1880.

Q. You do not have the history of that Point in your head?

A. No. I can refer to my books, because we backed him up some in his trap, and the history of the books is that he owes us money yet.

Q. Mr. Drysdale would know would he not?

A. I dont think he would. I can tell you by referring back to the books.

Q. You say that Mr. Wadhams came from here?

A. Yes, he built that cannery right below the hotel.

Q. Do you own that now?

A. No, he sold that to the A.B.C. Company.

Q. You think he is an American citizen now?

A. Oh, yes, he is an American all right, he always was, he was born in New York.

Q. Mr. Drysdale, he came from this side?

A. Mr. Drysdale is a New Brunswicker I think. He is from somewhere down in Nova Scotia.

I think that Sir Charles Tupper is a friend of his. I do not know but what they went to school together.

Q. When was the cannery established on Point Roberts?

A. Two years ago, I think.

Q. What did they do with their fish before that?

A. Well, there was only one trap there then, that was Waller's trap. There was one trap there, and I think there was a fellow named Kirby had another one. I think there was 2 traps. Oh, yes, it was farther back than that because Goodfellow has been there 4 or 5 years. The fish principally were smoked and salted and sold to Seattle and brought around here, quite a lot of them were brought around here. Whenever they had a big run of fish there, however, we had them in the river and did not want them. Mr. Goodfellow is a Province man, but I think he is a citizen of the United States. I do not know

how many nets were set on the Point, but not many until the last few years.

Q. Until then you did not have any reason to feel that they were doing harm?

A. No, not a particle until the last 2 or 3 years, and more particularly last year, when they put so many in there, it seemed to break the schools right up.

Q. What would be your idea of the restrictions on the pounds there?

A. My idea would be - they should not be allowed to go out only a certain distance, say just the length of one trap as it is now. They have miles and miles outside, almost, and they extend right across, almost across to Semiahmoo Point, as far over as you can see, you can see traps; and then they have them such a length there is no possibility for the fish to get by; they have to go in the trap, or turn around and go back.

The Indians, I think there has been a great injury done to the Indians there. They have had a right there I believe by treaty, that they have the reefs there; and the Indians go to work and pull the kelp off the reefs and form channels through it, and then they have dip nets; and they have a captain among them, and watch the fish in the shallow water going over these reefs; and a net is lying on the bottom and from the scows they bring the net up to the surface. And now this whole fishing is taken away from them.

Q. What do they call that kind of fishing?

A. Dip net fishing.

Q. Have you seen that?

A. The Indians doing it?

Q. Yes.

A. Oh, yes, lots of times. These Indians they used to catch the fish and smoked all their fish and dried them, and supplied themselves.



They always considered they had treaty rights on the Point. Mr. Waller went there and the Indians did not object to his going there, but he got to work and finally ran the Indians off altogether, and finally where they used to do their fishing, they were driven off altogether, and I think it has been a great injustice done to the Indians.

Q. Within a day or two we heard the Indians had secured an injunction?

A. Yes, but I believe it has been dissolved by the court. They procured an injunction, claiming this as treaty rights. When the treaty was made they were to be allowed certain things, and among them were all rights and privileges for fishing grounds and preserves, and camps, etc., and this was one of the fishing grounds, and now they have put all the traps there so they could not catch enough to eat, and run the Indians out. Drysdale, since he has been in charge of the whole thing, he has starved the poor

fellows out almost. Mr. Drysdale is in charge of the Alaska Company there. Mr. Wadhams is at Blaine, but I do not know whether he has much to do there or not. He has a great deal to do, but I have often understood he is not employed by the company.

Q. Then you would have there never more than one net. You would have them set single always?

A. I should say that would be right - not extend them out 2 or 3 miles!

Q. How many nets should go around the Point?

A. Well, they should be set a certain distance apart so as to give every man a show. The distance around the Point from the English side must be 5 or 6 miles, I think, from line to line each way. On our side we are not allowed to put traps on the sandheads. They have put traps pretty close to the boundary.

Q. The south side of the Point is how long?

A. This side, the southwest side, I should

judge it is  $1\frac{1}{2}$  or 2 miles from the boundary line up to Point Roberts. We call it 4 miles from Shiwas (?) to Point Roberts. The west side is probably about 2 miles, and the south side must be a long distance.

Q. Where do you go to get your fish?

A. About 12 miles from the mouth of the Fraser River. This is the course (referring to map) the sockeye is supposed to go; at Beechy Bay is about the first place we hear of them; then they come on up here, and then we hear of them about the next place at San Juan. Island, and they strike up through these straits and we get them in Roach Harbor, and then they go on up this mid channel of the San Juan Islands, and the east channel, but they very seldom go through the west channel; they generally go through the east channel and strike in at East Point and at Saturna Island, and then some go up Roach Harbor. They go up all the channels, in fact. Then they

strike across - these strike perhaps strait for Fraser River, but the ones that come up on the east side, the greater part of the fish go through here, there are traps on San Juan, and then they follow the shore up to Birch Bay and Birch Point, - Birch Point is where they propose to put some traps now. Then they strike in near the shore of Semiahmoo Bay and Boundary Bay to Point Roberts.

Q. Do the salmon go over the flats from Point Roberts to the Fraser River?

A. Oh, yes. They do not go right close up, but out farther. They go over the flats and go through the little channels.

Q. Do you know what salmon rivers there are along the coast of Washington?

A. There are no sockeye rivers. The cohos go up all the rivers of Washington, but the sockeyes never go up any of these rivers at all. They (the cohos) go up the Nicomecki River just above Blaine, and they go up all the small streams.



Q. How about the quinnat?

A. The quinnat never go up the small streams that I know of.

Q. Which salmon go up the Skagit River?

A. I think the cohos and dog salmon. We want fair protection, and as both governments are responsible here, I was very glad when I heard it was going to be done, and as an international business. It is to the interest of both parties to protect these fisheries. What we claim is this: If the American Government is going to allow those traps to be built and carried on to catch the fish the way they do, we think it a great piece of injustice on the part of our government not to allow us to do the same thing.

Q. Could you fish trap nets here?

A. Of course we could, but we are not allowed to do it, and therefore we have to compete in the same market, as they have in the English market; whereas they have an advantage over us

of 70,000,000 of people that we are not allowed to have, and they have an advantage over us for we are barred from that market. They are allowed all these privileges to catch their fish, and having our market and theirs together, and we are not allowed even the privilege of catching them.

Q. Where is the best fishing done in the Fraser River, in the middle or on the side?

A. Well, all over; the best fishing is done according to the stage of the water. It is principally done on the bars in medium depths of water, although with the deep nets they can catch lots of fish right in the middle of the river.

Q. Why would not pound nets be safer than gill nets in the river?

A. I do not know that they would be any safer, but they would be cheaper.

Q. You can use gill nets in such a way as to cut off the progress of the fish up the river;

one man on one side and the other one on the other; would they cut off more than the pound nets?

A. I think they would, but at the same time where there are so many parties claiming privileges, and the short distance of the river we have, it is a very hard thing to settle. For instance, here there are somewhere in the neighborhood of 2,000 boats running, and you could not put in that many pound nets. I would much prefer to see the fishing done with pound nets, and I think the fish would have a broader river than they do now.

Q. Would it be possible to fish them up the river where the current is so strong?

A. Oh, yes.

Q. Where is most of the fishing done in the river with respect to its length?

A. From Westminster down I think the most of it is done in proportion to its length, than there is above that.

Q. How far beyond the mouth of the river do they fish?

A. Oh, they fish out 10 or 15 miles.

Q. At what time?

A. All day long.

Q. I mean for the sockeye run?

A. Well, for the quinnat they go out very little. Generally for the quinnat salmon in the spring it is rough and dangerous out there, but for the fall run of quinnat they fish outside.

Q. What is your water here, brackish?

A. In the river you mean? It is brackish in the winter and fall.

Q. How far down do you have to go to get brackish water now?

A. Oh, you could not get brackish water in the river at all now; the volume of water is so great it keeps the tide from backing up in the river, and I don't think you could get brackish water out on the sand heads in the channel either. I think it is about 8 or 10 miles after

you leave the mouth of the river proper until you get out to the end of the sand heads. The lighthouse is very near the end of the sand bank. That bank is making out all the time. It is 3 or 4 miles from the river, the lighthouse is, and is useless as far as the river is concerned; it is good only for vessels going up the gulf.

Q. You have a weekly close time here, and that is from Saturday morning until when?

A. Saturday morning from six until Sunday evening at six. We used to have it Saturday noon. That is plenty long enough for the fish. During every day there is quite a spell, for instance, when they are shifting their boats there is quite a spell when there are few boats running.

Q. They were saying at Westminster that they would get better catches Sunday night and Monday morning than any other time; these fish escaping the lower nets and getting up there; so that it made it look simply as though the time was short and they got up there just about time



to be caught by the other nets.

A. That is a kind of ridiculous argument.

It is this way: You take during the week 1200 or 1500 boats, and they are catching lots of fish, and the fish are running up the river very slow at certain times, and you take 2 days and the fish are running slow, playing around and these 1200 or 1500 boats are catching these fish, and there are 2 days they havenot vbeen caught at all, and they are bound to accumulate for the reason that none have been caught, and if these days were fished the same as the others they would be the same right through. I do not think these nets intercept the progress of the fish. I think when the sockeye or any other salmon get ready to run nothing will stop them. There are plenty get up to the spawning grounds. Tens of thousands of them get up there and die, and tens and hundreds of thousands of young fry that is ruined by the Indians; or, rather, stolen by the Indians, and hundreds of thousands of them

destroyed by the Indians by catching them, going on the salmon spawning beds and digging the eggs up. They do that for food.

Q. Do they catch the very small salmon up there?

A. Yes.

Q. How do they do that?

A. With a sort of weir made of willow.

Q. Is that during the summer?

A. That is in the spring. That is young fish of the year before.

Q. How large would they be then?

A. About 6 or 8 inches. In the spring at times here the river is full of small fish; little bits of things; they look like salmon about 2 inches long; and I got a lot of them one year, and they looked exactly like salmon, and I put them in a pail to keep them to see what they would come to, and one day I went to work and put them in a galvanized bucket and the bucket poisoned the water, and every one of them was

dead in the morning. I intended to give McNab some. They had the little fin near the tail and the stripe along the side.

Q. Did you ever see the fish that are bound out to sea? these fish that the Indians take, did you ever see them passing out?

A. No.

Q. What is your idea about the sockeye, do they all die up the river?

A. Yes, 99 per cent of them do. I am confident they never get back from that river.

Q. Why do they die?

A. Well, I think they have performed the functions of nature, and the time has come for them. I have not the least doubt that they, a large proportion of them do.

Q. It could not be that it was an accidental matter of their dying?

A. No, indeed, they could not get back, the rocks and canyons they go through, they could not get back. Their noses are all butted off



when they get there. Sometimes some of these dog salmon may get back, because you will see them swimming around in the fall with their back fin out of water, just ready to die.

Q. How about the quinnat?

A. I never saw any of them.

Q. Steelhead?

A. No. I have never heard of any man catching any spent fish when they are going out. For instance, in September, sometimes along pretty late in September, there is some sockeyes come on with the cohos, they are counted spent fish, and I think they are a fish that has commenced to run late, and not ready to spawn. I have had my men examine them for days and days, and we never heard tell of one without any spawn in it. I have never seen any of the Indians who have caught any of these spent fish.

Q. You do not consider that there is any evidence of a decrease of salmon in this region yet?

A. No. I cannot say there is a particle of decrease. If anything, I should say they were almost on the increase; that is particularly the off years. The only decrease I have ever seen was last year, and they came in such immense quantities when they did come there was no chance of catching them. At the mouth of the river as far as the eye could go there was nothing but salmon, and that kept up very late into the season, and I think it was a school that has been broken up by these traps and they congregated around the mouth of the river and all came up at once.

Q. When was the height of the flood last year?

A. In June, but when the fishing commenced the flood was over and the water was clearer than usual.

Q. What is your fishing season on the river for salmon? - the whole thing, when are you allowed to begin?

A. We are allowed to begin in February for the quinnat, and keep on until - I do not know exactly, as I have never fished them.

Q. When do you fish?

A. I fish the sockeyes altogether, and the cohos. I fished them from July until the first of September. It was the 25th of August last year.

Q. When are the pound nets operated?

A. They are operated all the time whenever there is fish.

Q. Do they operate them in February and March?

A. Well, there is no fish, that is the reason they do not.

Q. How early would they probably begin to use them?

A. The majority of them do not commence until the sockeye comes up, and then quite a number keep on until the cohos are over.

Q. What laws has Washington

A. None at all I think. I do not think there is any law. RThere was a law there - there is a law that governs Puget Sound, but they claim that Point Roberts is not Puget Sound, and they have no law. The Act distinctly mentions Puget Sound, and the other is the Gulf of Georgia, also they claim they have no law. I think Judge Winne of Whatcom decided that there is no law. I think you ought to see Judge Winne of Whatcom, on this question, with regard to Point Roberts, because Drysdale and Goodfellow have lawed over it for 2 or 3 years, and they could give you more information than anyone else; and I think Judge Winne, of Whatcom, could give you more information than any man in Whatcom. On account of these lawsuits he has gotten all the information there is. You can gain a great deal of information from Goodfellow, and I think he is honest, and I will tell you why I know it: He owed me considerable money and we had a mis-

understanding about it and I sued him for it; and we had a suit, and we settled it out of court and the conditions were, he was to pay me a certain amount of money this year in fish, and he was to fish his traps for me at a certain figure, and he was to carry his contract out at a certain figure. Well, now he has been offered nearly twice as much for the fish as I am paying him, and he said, "no, I made my contract with Ladner, and I am going to stand by it". He is a plain outspoken fellow.

Q. The general question of the offal?

A. The general question of the offal has been a burning question with us for a number of years, and I contend that the offal does not in any way interfere with salmon, for the reason that the principal part, that is, spawn and the roe, and all these things is consumed by these scavenger fish and that keeps them off the spawning beds. The heads, tails and wind bladder, of course you will see floating around the river,

and it does not interfere with anything and does not pollute the water, because the Fraser water is too cold for anything of that kind. All these things feed the sturgeon. The sturgeon are around the canneries by hundreds feeding on those heads. And the way they have been doing, it has been taken out, half way out from the sand heads, and taking out 150 tons at a time, and opening up a box and letting the thing go down all in one lump, and if anything would frighten fish that would, but letting it go from the canneries, I do not think it harms the fish whatever.

Q. Have you ever taken the temperature of the water about here?

A. No, I have not, but Peele of Westminster has. He is a reporter. He reports the meteorological matters for the United States. He knows about the temperature of the river, he will tell you correctly also.

Q. Do you ever see any shad in this river?

A. Yes, a few. About 3 years ago my men caught one, but I have heard of several being caught off the river. I do not know as I ever heard of any being caught in the river, but they have been caught outside.

Q. You have no details?

A. No. The reason I know about it was, an Indian came in with a fish in a boat one time and took it to my foreman and he did not know what it was and brought it to me, and I said that fish is all right. Take it over to my house and tell the Indian it is not good to eat, and he said, "why?" and I said that is a shad, - and I found it very nice too. The only fault I had to find with it there was too many bones in it.

Q. Whom do the 3 other independent fishermen on Point Roberts sell their fish to? Do they come here?

A. One of them comes here to the A.B.C. Company, and I do not know but 2 traps do. They

put them in this year you know.

Q. How many canneries are there on this river now? can you tell?

A. I think there is about 34.

Q. You would say 24 without counting the North Arm?

A. There is 34 or 35 on the Fraser River altogether, the uppermost being at Westminster. That is, when I say this, there is 3 of those burned down, but they will be built up again. For instance, there is the Felix cannery represents 2 canneries, and several canneries represent 2 canneries.

Q. Is there any history of the canning on this river? Do you know whether any Canadian reports give an account of the growth of the industry?

A. Oh, yes, there are reports given every year of the growth of the canneries, and Mr. McNab will know the exact number.



I think the run is coming later every year. They come in now all the way from the 15th or 20th up to the 30th. Last year they did not get in until later than that.

Mr. Wilmot would question a fisherman, and if his opinions coincided with those of Mr. Wilmot, he would say to him, "that is right, you have the right idea of the salmon", but if the ideas of the fisherman conflicted with his, he would tell him he was entirely mistaken and would not listen to him. Mr. Wilmot told me personally, "I am out here officially, I was just in the northwest and thought I would take a run over here and see you." This was the time he wrote a book on the fisheries and it was reported in the Blue Books. After we had treated him as well as a man could be treated he went back home and said he could buy any of the cannerymen with a cigar and a bottle of whiskey.

Last year the body of fish came in the main

channel of the river, and there was not as many fish came through Canoe Pass last year as usual. Usually a great many come through Canoe Pass and the North Arm. This year they are going about the same in both Canoe Pass and the main river. North Arm is not as good as it was. This last year was the first year I ever saw it. I think the pound nets must break the schools up in some way that causes it.

Whenever they visit the traps at Point Roberts they have to clear at Blaine, the fee for which is \$4.00, and besides they have to make out 8 separate sheets for clearance, which cost 10 cents each. Mr. Ladner would like to make some arrangement so that his boats would not have to go to Blaine to clear, as it is about 3 hours' run, and he would be willing to pay the wages of an officer to stay on board so that he would not have to clear.